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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/559,701

12/06/2005

Catherine Abbadie

21156YP

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210 7590 04/03/2008
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EXAMINER

PAGONAKIS, ANNA

ART UNIT

PAPER NUMBER

1614

MAIL DATE

DELIVERY MODE

04/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/559,701	Applicant(s) ABBADIE ET AL.	
	Examiner ANNA PAGONAKIS	Art Unit 1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-5 remain pending under examination.

Applicant's amendment filed on 12/20/2007 has been received and entered into the present application.

Applicant's arguments, filed 12/20/2007, have been fully considered but they are not deemed to be persuasive. Rejections and objections not reiterated from the previous Office Action are hereby withdrawn. The following rejections are either reiterated or newly applied. They constitute the complete set of rejections presently being applied to the instant application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jiao et al (US PGPub 2005/0101628A1) in view of Wang (Neuroscience, 2002, 114, 3, 529-546).

Jiao et al. teach the elected compound in claim 2 as a modulator of chemokine activity (specification, page 52, example 23 and paragraph [0009]). The disclosure is further directed to pharmaceutical compositions comprising these compounds and the use of these compounds and compositions in the prevention or treatment of such diseases in which chemokine receptors are involved (paragraph [0009]). The disclosure also states that inhibitors of chemokine receptor function may also be useful in the treatment and prevention of neuropathic pain” (specification page 8, column 2, line 8).

Wang et al. teach that neuropathic pain is induced by injury or disease of the nervous system (abstract). The pathophysiology of neuropathic pain has been investigated using rat peripheral nerve injury models such as L5 and L6 spinal nerve ligation (page 530, column 1, first paragraph). The authors studied the global gene regulation in the SNL model in both the dorsal root ganglion (DRG) and spinal cord. The SNL model involves the tight ligation and injury of spinal nerves L5 and L6, causing spontaneous pain, allodynia and hyperalgesia (page 530, column 1, paragraph 2). A remarkable concerted up-regulation of genes with roles in inflammation was found in our study (page 542, column 2, second paragraph). Among the genes that are regulated in both the DRGs and the spinal cord are genes important for neuroinflammation and immune activation. Several chemokines and chemokine receptors seem to be regulated to a greater extent in the spinal cord (page 541, column 1, first paragraph and page 543, column 2, second paragraph). For instance, C-C chemokine receptor type 5 are all confirmed to be up-regulated, providing clear evidence for neuroinflammation in the spinal cord

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(page 541, column 2, second paragraph). Further, chemokines may play an important role in recruiting immune cells into areas of active inflammation. In addition to the chemoattraction of immune cells, chemokines may also contribute to the pathogenesis by directly affecting nociceptive signal transduction. All these possibilities suggest that glial activation may play a role in the pathophysiology of neuropathic pain (page 544, column 1, first paragraph).

Though Jaio et al. does not expressly teach that the modulation of chemokine activity using the elected compound is used for the treatment of neuropathic pain, Wang et al. is cited for its teachings that chemokines and chemokine receptors may play a role in the pathophysiology of neuropathic pain. It is clear from the teaching that it would be prima facie obvious to one of ordinary skill in the art that the elected compound which is a chemokine activity modulator of Jaio et al. would have reasonably expected to have positive effect on neuropathic pain, given that Wang et al. has taught that is known to play a role in the pathophysiology of neuropathic pain. Further, the teachings of Jaio et al. in combination with Wang et al. raise the reasonable expectation of success that the treatment of neuropathic pain using the elected compound which is a chemokine modulator would also have been reasonably suggestive of efficacy.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANNA PAGONAKIS whose telephone number is (571)270-3505. The examiner can normally be reached on Monday thru Thursday, 9am to 5pm EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin H. Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AP

/Ardin Marschel/
Supervisory Patent Examiner, Art Unit 1614